U.S. Department of the Interior • U.S. Geological Survey

MINERAL INDUSTRY SURVEYS

Gordon P. Eaton, Director

Reston, VA 20192

For information, contact:

Joyce Ober, Commodity Specialist MINES-DATA: (703) 648-7799
Telephone: (703) 648-7717, Fax: (703) 648-7722 MINES FaxBack: (703) 648-4999

E-mail: jober@usgs.gov

Internet: http://minerals.er.usgs.gov/minerals

Maria Arguelles, Statistical Assistant

Telephone: (703) 648-7990 E-mail: marguell@usgs.gov

SULFUR IN APRIL 1997

During the month, production of combined Frasch and recovered elemental sulfur was 918,000 metric tons, according to the U.S. Geological Survey. April production was slightly higher than that of March 1997 and 5% higher than that of April 1996. Shipments of these combined products were 4% higher than those of March 1997.

Import and export data for April 1997 were not available at

the time of publication. Import/export data and apparent consumption for April 1997 will be published in the May 1997 Sulfur Mineral Industry Surveys. Imports of recovered sulfur for March 1997 were 145,000 tons. Exports of sulfur for the same period were 10,000 metric tons. Imports of sulfuric acid for March 1997 were 192,000 tons; exports were 10,000 tons.

TABLE 1 SALIENT SULFUR STATISTICS 1/

(Thousand metric tons)

		Shipments,			
Period	Frasch	Petroleum 2/	Natural gas 3/	Total 3/	all sources
1996	W	5,370	4,970	10,300	10,400
JanApr. 1996	W	1,720	1,720	3,430	3,430
1996:					
April	W	449	423	872	898
May	W	467	422	889	863
June	W	416	397	813	763
July	W	433	427	860	832
August	W	468	432	900	917
September	W	440	401	841	872
October	W	466	412	878	885
November	W	481	354	835	858
December	W	484	413	897	949
1997:					
January	W	444	425	869	872
February	W	393	407	800	798
March	W	448	467	915	907
April	W	490 p/	428 p/	918 p/	945 p/
Total	W	1,780	1,730	3,500	3,520

p/ Preliminary. W Withheld to avoid disclosing company proprietary data; included with "Natural gas."

TABLE 2 U.S. IMPORTS OF SULFUR 1/

(Thousand metric tons and thousand dollars)

	Cana	ıda	Mexic	0	Total, all coun	tries 2/
Period	Quantity	Value 3/	Quantity	Value 3/	Quantity	Value 3/
1996:	1,090	31,000	467	21,200	1,730	61,600
JanMar. 1996	285	11,400	92	4,410	415	18,800
1996:						
March	93	2,480	37	1,720	130	4,680
April	82	2,220	37	1,990	119	4,660
May	119	2,400	37	1,280	186	5,520
June	114	2,100	36	1,760	180	4,860
July	111	4,610	36	1,680	148	6,700
August	80	1,590	57	2,510	157	4,910
September	59	1,380	58	2,470	135	4,410
October	92	2,170	19 e/	826	111	3,110
November	81	1,740	40	1,750	155 e/	4,670
December	66	1,350	57	2,510	123	3,950
1997:						
January	74	1,440	60	2,730	134	4,360
February	82	1,870	41	3,220	122	5,290
March	83	1,620	61	2,550	145	5,150
Total	239	4,930	162	8,510	401	14,800

e/ Estimated

Source: Bureau of the Census; as adjusted by U.S. Geological Survey.

^{1/} Data are rounded to three significant digits; may not add to totals shown.

^{2/} Includes a small quantity from coking operations.

^{3/} Includes data from Frasch producers.

^{1/} Data are rounded to three significant digits; may not add to totals shown.

^{2/} May include other countries not listed.

^{3/} Declared customs valuation.

TABLE 3 U.S. IMPORTS OF SULFURIC ACID 1/

(Thousand metric tons and thousand dollars)

		Canada			Europe			Total 2/	
		Sulfur			Sulfur			Sulfur	
Period	Quantity	content	Value 3/	Quantity	content	Value 3/	Quantity	content	Value 3/
1996:	1,600	522	41,000	210	69	2,520	2,080	682	48,500
JanMar. 1996	366	120	10,000	55	19	811	531	174	12,200
1996:									
March	144	47	3,900	35	12	466	199	65	4,510
April	126	41	3,620	40	13	421	202	66	4,350
May	147	48	3,990	20	7	223	192	63	4,510
June	113	37	2,670	21	7	160	140	46	3,460
July	106	35	2,770	21	7	86	132	43	3,210
August	127	41	3,260	11	3	176	138	45	3,620
September	156	51	3,760	19	6	70	195	64	4,160
October	144	47	3,690				161	53	3,890
November	166	54	3,900	10	3	79	223	73	4,330
December	146	48	3,360	13	4	496	167	55	4,860
1997:									
January	108	35	3,080	13	4	207	145	47	4,650
February	135	44	3,320				139	45	4,250
March	131	43	3,390	28	9	116	192	63	4,330
Total	374	122	9,790	41	13	323	476	155	13,200

^{1/} Data are rounded to three significant digits; may not add to totals shown.

Source: Bureau of the Census.

 $\label{eq:table 4} \textbf{U.S. EXPORTS OF SULFUR AND SULFURIC ACID 1/}$

(Thousand metric tons and thousand dollars)

	Sulf	ur		Sulfuric acid	
				Sulfur	
Period	Quantity	Value 2/	Quantity	content	Value 2/
1996:	913	51,700	117	38	12,300
JanMar. 1996	250	16,300	29	9	3,080
1996:					
March	66	1,590	10	3	900
April	120	6,720	7	2	938
May	15	2,330	9	3	1,080
June	124	4,990	8	3	785
July	62	3,160	9	3	978
August	139	7,280	12	4	1,090
September	36	1,910	12	4	1,080
October	92	3,760	12	4	1,440
November	59	3,510	10	3	869
December	16	1,810	9	3	1,020
1997:	-				
January	10	746	11	4	1,170
February	(3/)	15	7	2	834
March	10	856	10	3	1,030
Total	20	1,620	28	9	3,030

^{1/} Data are rounded to three significant digits; may not add to totals shown.

Source: Bureau of the Census.

^{2/} May include other countries not listed.

^{3/} Declared customs valuation.

^{2/} Declared f.a.s. (free alongside ship) valuation.

^{3/} Less than 1/2 unit.

TABLE 5 U.S. CONSUMPTION OF SULFUR 1/

(Thousand metric tons)

Period	Domestic sources 2/	Imports	Consumption
1996:	9,460	1,730	11,200
JanMar. 1996	2,280	415	2,700
1996:	_		
March	769	130	899
April	778	119	897
May	848	186	1,030
June	639	180	819
July	770	148	918
August	778	157	935
September	836	135	971
October	793	111	904
November	- 799	155 e/	954
December	933	123	1,060
1997:			
January	862	134	996
February	798	122	920
March	897	145	1,040
Total	2,560	401	2,960

e/ Estimated.

TABLE 6
RECOVERED SULFUR PRODUCED AND SHIPPED IN THE UNITED STATES,
BY PAD (PETROLEUM ADMINISTRATION FOR DEFENSE) DISTRICT 1/

(Thousand metric tons)

	April 1997 p/		March	March 1997		Total 1997 2/		Total 1996	
District and source	Production	Shipments	Production	Shipments	Production	Shipments	Production	Shipments	
PAD 1:									
Petroleum and coke	8	8	8	8	32	32	217	225	
Natural gas	14	14	13	13	59	59	51	51	
Total	22	22	21	21	91	91	267	276	
PAD 2:									
Petroleum and coke	80	79	69	68	314	317	927	925	
Natural gas	3	4	4	3	12	12	50	49	
Total	83	83	73	71	326	329	977	975	
PAD 3: 3/									
Petroleum and coke	297	289	269	259	1,050	1,050	3,140	3,110	
Natural gas 4/	323	348	359	363	1,310	1,330	3,860	3,920	
Total 5/	620	637	628	622	2,360	2,380	7,000	7,030	
PAD 4 and 5: 6/									
Petroleum and coke	106	110	102	107	376	384	1,090	1,100	
Natural gas	87	93	91	86	350	343	1,010	992	
California	87	91	82	87	297	303	828	834	
Total	193	203	194	193	726	726	2,100	2,090	
Grand total	918	945	915	907	3,500	3,520	10,300	10,400	

p/ Preliminary.

- 1/ Data are rounded to three significant digits; may not add to totals shown.
- 2/ May include revisions to prior months.
- 3/ Includes Puerto Rico and the U.S. Virgin Islands.
- 4/ Frasch production is included in the natural gas production to avoid disclosing company proprietary data.
- 5/ Includes data from Frasch producers.
- 6/ Quantities produced and shipped in California included in petroleum and natural gas. California total shown for information purposes only.

 $^{1/\,\}mbox{Data}$ are rounded to three significant digits; may not add to totals shown.

^{2/} Calculated as shipments minus exports.

 ${\bf TABLE~7} \\ {\bf COMPARATIVE~SULFUR~AND~SULFURIC~ACID~STATISTICS~1/} \\$

(Million metric tons per year [annualized basis] and dollars per metric ton for period shown)

		1996		
	April	March	Year to date	Total
Production	11.20 p/	10.80	10.60	10.30
Shipments	11.50 p/	10.70	10.70	10.40
Exports of sulfur	NA	0.12	0.08	0.91
Imports of sulfur:				
Canada	NA	0.98	0.97	1.09
Mexico	NA	0.72	0.66	0.47
Total	NA	1.71	1.63	1.73
Exports of H2SO4	NA	0.12	0.11	0.12
Imports of H2SO4:				
Canada	NA	1.54	1.52	1.60
Europe	NA	0.33	0.17	0.21
Total 2/	NA	2.26	1.93	2.08
Consumption: 3/				
Domestic sources	NA	10.60	10.40	9.46
Imports	NA	1.71	1.63	1.73
Total	NA	12.30	12.00	11.20
Sulfur export values 4/	NA	\$86	\$81	\$57
Sulfur import values: 4/				
Canada	NA	\$20	\$21	\$28
Mexico	NA	\$42	\$53	\$45
Average	NA	\$36	\$37	\$36
H2SO4 export values 4/	NA	\$103	\$108	\$106
H2SO4 import values: 4/				
Canada	NA	\$26	\$26	\$26
Europe	NA	\$4	\$8	\$12
Average	NA	\$23	\$28	\$23

p/ Preliminary. NA Not available.

^{1/} Data are rounded to three significant digits; may not add to totals shown.

^{2/} Includes other countries not listed.

^{3/} Because trade data was not available, April consumption was not determined.

^{4/} Average value per ton for most recent data available.